Sergey I Nikolenko

List of Publications by Year
in descending order

116 papers	23,380 citations	471509 17 h-index	74163 75 g-index
126 all docs	126 docs citations	126 times ranked	30142 citing authors

#	Article	IF	Citations
1	Cross-Domain Limitations of Neural Models on Biomedical Relation Classification. IEEE Access, 2022, 10, 1432-1439.	4.2	2
2	The Russian Drug Reaction Corpus and neural models for drug reactions and effectiveness detection in user reviews. Bioinformatics, 2021, 37, 243-249.	4.1	18
3	Robust Distributed Monitoring of Traffic Flows. IEEE/ACM Transactions on Networking, 2021, 29, 275-288.	3.8	10
4	Formalization and taxonomy of compute-aggregate problems for cloud computing applications. Computer Networks, 2021, 189, 107915.	5.1	0
5	Competitive buffer management for packets with latency constraints. Computer Networks, 2021, 189, 107942.	5.1	2
6	Approximate Packet Classifiers With Controlled Accuracy. IEEE/ACM Transactions on Networking, 2021, 29, 1141-1154.	3.8	2
7	SRPT-based Congestion Control for Flows with Unknown Sizes. , 2021, , .		1
8	ResNet. , 2021, , 99-114.		0
9	Computational Discovery of TTF Molecules with Deep Generative Models. Frontiers in Chemistry, 2021, 9, 800133.	3.6	4
10	Molecular Sets (MOSES): A Benchmarking Platform for Molecular Generation Models. Frontiers in Pharmacology, 2020, 11, 565644.	3.5	266
11	Towards Software-Defined Buffer Management. IEEE/ACM Transactions on Networking, 2020, 28, 2337-2349.	3.8	5
12	New Alternatives to Optimize Policy Classifiers. IEEE/ACM Transactions on Networking, 2020, 28, 1088-1101.	3.8	5
13	Improving unsupervised neural aspect extraction for online discussions using out-of-domain classification. Journal of Intelligent and Fuzzy Systems, 2020, 39, 2487-2496.	1.4	2
14	Molecular Generation for Desired Transcriptome Changes With Adversarial Autoencoders. Frontiers in Pharmacology, 2020, 11, 269.	3.5	23
15	Production of ultrafine-grained spherical $\hat{I}^2$-WC-W$_2$C-Co microparticles by electro discharge erosion of WC-15Co alloy in glycerol and their solutions. Materials Research Express, 2020, 7, 096504.	1.6	7
16	ColocML: machine learning quantifies co-localization between mass spectrometry images. Bioinformatics, 2020, 36, 3215-3224.	4.1	29
17	RecVAE: A New Variational Autoencoder for Top-N Recommendations with Implicit Feedback. , 2020, , .		85
18	Recognizing Preferred Grammatical Gender in Russian Anonymous Online Confessions. Lecture Notes in Computer Science, 2020, , 222-230.	1.3	0

#	ARTICLE	IF	CITATIONS
19	Towards declarative self-adapting buffer management. Computer Communication Review, 2020, 50, 30-37.	1.8	6
20	DeepCycle reconstructs a cyclic cell cycle trajectory from unsegmented cell images using convolutional neural networks. Molecular Systems Biology, 2020, 16, e9474.	7.2	19
21	Approximate Classifiers with Controlled Accuracy. , 2019, , .		3
22	Tooth detection and numbering in panoramic radiographs using convolutional neural networks. Dentomaxillofacial Radiology, 2019, 48, 20180051.	2.7	231
23	AspeRa: Aspect-Based Rating Prediction Model. Lecture Notes in Computer Science, 2019, , 163-171.	1.3	6
24	Free-Lunch Saliency via Attention in Atari Agents. , 2019, , .		11
25	Breast Tumor Cellularity Assessment Using Deep Neural Networks. , 2019, , .		5
26	Robust Distributed Monitoring of Traffic Flows. , 2019, , .		6
27	Label Denoising with Large Ensembles of Heterogeneous Neural Networks. Lecture Notes in Computer Science, 2019, , 250-261.	1.3	5
28	Faster RPNN: Rendering Clouds with Latent Space Light Probes. , 2019, , .		3
29	Large-Scale Transfer Learning for Natural Language Generation. , 2019, , .		47
30	3D Molecular Representations Based on the Wave Transform for Convolutional Neural Networks. Molecular Pharmaceutics, 2018, 15, 4378-4385.	4.6	74
31	Admission control in shared memory switches. Journal of Scheduling, 2018, 21, 533-543.	1.9	1
32	Personal insights on three research directions in networked systems. , 2018, , .		0
33	Priority Queueing for Packets With Two Characteristics. IEEE/ACM Transactions on Networking, 2018, 26, 342-355.	3.8	5
34	Exploring convolutional neural networks and topic models for user profiling from drug reviews. Multimedia Tools and Applications, 2018, 77, 4791-4809.	3.9	17
35	Building Detection from Satellite Imagery Using a Composite Loss Function. , 2018, , .		17
36	Land Cover Classification with Superpixels and Jaccard Index Post-Optimization. , 2018, , .		5

#	Article	IF	Citations
37	New Alternatives to Optimize Policy Classifiers. , 2018, , .		4
38	Land Cover Classification from Satellite Imagery with U-Net and Lovász-Softmax Loss. , 2018, , .		42
39	Formalizing Compute-Aggregate Problems in Cloud Computing. Lecture Notes in Computer Science, 2018, , 377-391.	1.3	0
40	Medical concept normalization in social media posts with recurrent neural networks. Journal of Biomedical Informatics, 2018, 84, 93-102.	4.3	65
41	How to implement complex policies on existing network infrastructure. , 2018, , .		12
42	Distributed Counting Along Lossy Paths Without Feedback. Lecture Notes in Computer Science, 2018, , 30-33.	1.3	2
43	Topic modelling for qualitative studies. Journal of Information Science, 2017, 43, 88-102.	3.3	186
44	The impact of processing order on performance: A taxonomy of semi-FIFO policies. Journal of Computer and System Sciences, 2017, 88, 220-235.	1.2	1
45	Network simplification preserving bandwidth and routing capabilities. , 2017, , .		5
46	druGAN: An Advanced Generative Adversarial Autoencoder Model for de Novo Generation of New Molecules with Desired Molecular Properties in Silico. Molecular Pharmaceutics, 2017, 14, 3098-3104.	4.6	384
47	FDR-controlled metabolite annotation for high-resolution imaging mass spectrometry. Nature Methods, 2017, 14, 57-60.	19.0	314
48	Heterogeneous packet processing in shared memory buffers. Journal of Parallel and Distributed Computing, 2017, 99, 1-13.	4.1	2
49	Throughput optimization with latency constraints. , 2017, , .		5
50	Using semantic analysis of texts for the identification of drugs with similar therapeutic effects. Russian Chemical Bulletin, 2017, 66, 2180-2189.	1.5	13
51	Efficient FIB Representations on Distributed Platforms. IEEE/ACM Transactions on Networking, 2017, 25, 3309-3322.	3.8	5
52	General ternary bit strings on commodity longest-prefix-match infrastructures. , 2017, , .		11
53	A programmable buffer management platform. , 2017, , .		7
54	Planning in compute-aggregate problems as optimization problems on graphs. , 2017, , .		2

#	ARTICLE	IF	CITATIONS
55	Combination of Deep Recurrent Neural Networks and Conditional Random Fields for Extracting Adverse Drug Reactions from User Reviews. Journal of Healthcare Engineering, 2017, 2017, 1-9.	1.9	45
56	User Profiling in Text-Based Recommender Systems Based on Distributed Word Representations. Communications in Computer and Information Science, 2017, , 196-207.	0.5	3
57	Constructing Aspect-Based Sentiment Lexicons with Topic Modeling. Communications in Computer and Information Science, 2017, , 208-220.	0.5	5
58	Automated Prediction of Demographic Information from Medical User Reviews. Lecture Notes in Computer Science, 2017, , 174-184.	1.3	5
59	Detecting Interethnic Relations with the Data from Social Media. Communications in Computer and Information Science, 2017, , 16-30.	0.5	5
60	Word Embeddings for User Profiling in Online Social Networks. Computacion Y Sistemas, 2017, 21, .	0.3	8
61	Demographic Prediction Based on User Reviews about Medications. Computacion Y Sistemas, 2017, 21, .	0.3	4
62	Topic Quality Metrics Based on Distributed Word Representations. , 2016, , .		28
63	Pseudo-bimodal community detection in Twitter-based networks. , 2016, , .		0
64	FIB efficiency in distributed platforms. , 2016, , .		13
65	Stable topic modeling for web science. , 2016, , .		7
66	Online recommender system for radio station hosting based on information fusion and adaptive tag-aware profiling. Expert Systems With Applications, 2016, 55, 546-558.	7.6	15
67	Communities of co-commenting in the Russian LiveJournal and their topical coherence. Internet Research, 2016, 26, 710-732.	4.9	10
68	Large profits or fast gains: A dilemma in maximizing throughput with applications to network processors. Journal of Network and Computer Applications, 2016, 74, 31-43.	9.1	5
69	How to represent IPv6 forwarding tables on IPv4 or MPLS dataplanes. , 2016, , .		9
70	Detecting Opinion Polarisation on Twitter by Constructing Pseudo-Bimodal Networks of Mentions and Retweets. Communications in Computer and Information Science, 2016, , 169-178.	0.5	1
71	On demand elastic capacity planning for service auto-scaling. , 2016, , .		4
72	Gibbs sampler optimization for analysis of a granulated medium. Technical Physics Letters, 2016, 42, 837-839.	0.7	6

#	Article	IF	Citations
73	BASEL (Buffer mAnagement SpEcification Language). , 2016, , .		3
74	Exploiting Order Independence for Scalable and Expressive Packet Classification. IEEE/ACM Transactions on Networking, 2016, 24, 1251-1264.	3.8	29
75	Online Scheduling FIFO Policies with Admission and Push-Out. Theory of Computing Systems, 2016, 58, 322-344.	1.1	12
76	Single and Multiple Buffer Processing. , 2016, , 1988-1994.		9
77	Stable Topic Modeling with Local Density Regularization. Lecture Notes in Computer Science, 2016, , 176-188.	1.3	9
78	Mining Ethnic Content Online with Additively Regularized Topic Models. Computacion Y Sistemas, 2016, 20, .	0.3	8
79	SAX-PAC (Scalable And eXpressive PAcket Classification). Computer Communication Review, 2015, 44, 15-26.	1.8	20
80	SVD-LDA: Topic Modeling for Full-Text Recommender Systems. Lecture Notes in Computer Science, 2015, , 67-79.	1.3	2
81	A Probabilistic Rating System for Team Competitions with Individual Contributions. Communications in Computer and Information Science, 2015, , 3-13.	0.5	1
82	Discerning Depression Propensity Among Participants of Suicide and Depression-Related Groups of Vk.com. Communications in Computer and Information Science, 2015, , 24-35.	0.5	4
83	Priority queueing with multiple packet characteristics. , 2015, , .		19
84	Single Cells within the Puerto Rico Trench Suggest Hadal Adaptation of Microbial Lineages. Applied and Environmental Microbiology, 2015, 81, 8265-8276.	3.1	43
85	Inferring Sentiment-Based Priors in Topic Models. Lecture Notes in Computer Science, 2015, , 92-104.	1.3	10
86	Single and Multiple Buffer Processing. , 2014, , 1-9.		10
87	Shared Memory Buffer Management for Heterogeneous Packet Processing. , 2014, , .		19
88	SAX-PAC (Scalable And eXpressive PAcket Classification). , 2014, , .		48
89	Strategies for Mitigating TCAM Space Bottlenecks. , 2014, , .		14
90	Latent dirichlet allocation. , 2014, , .		39

#	Article	IF	Citations
91	Balancing work and size with bounded buffers. , 2014, , .		17
92	A complete one-way function based on a finite rank free $\mathbb{Z}\times\mathbb{Z}$ -module. Journal of Mathematical Sciences, 2013, 192, 307-315.	0.4	0
93	BayesHammer: Bayesian clustering for error correction in single-cell sequencing. BMC Genomics, 2013, 14, S7.	2.8	429
94	Analysis and Interpretation of Imaging Mass Spectrometry Data by Clustering Mass-to-Charge Images According to Their Spatial Similarity. Analytical Chemistry, 2013, 85, 11189-11195.	6.5	48
95	Efficient demand assignment in multi-connected microgrids. , 2013, , .		0
96	Towards efficient implementation of packet classifiers in SDN/OpenFlow. , 2013, , .		32
97	Efficient demand assignment in multi-connected microgrids with a shared central grid. , 2013, , .		4
98	Feebly secure cryptographic primitives. Journal of Mathematical Sciences, 2013, 188, 17-34.	0.4	1
99	Circuit complexity of linear functions: gate elimination and feeble security. Journal of Mathematical Sciences, 2013, 188, 35-46.	0.4	0
100	Multi-queued network processors for packets with heterogeneous processing requirements. , 2013, , .		21
101	Interval Semi-supervised LDA: Classifying Needles in a Haystack. Lecture Notes in Computer Science, 2013, , 265-274.	1.3	17
102	Continuous hard-to-invert functions and biometric authentication. Groups, Complexity, Cryptology, 2012, 4, .	0.3	0
103	FIFO Queueing Policies for Packets with Heterogeneous Processing. Lecture Notes in Computer Science, 2012, , 248-260.	1.3	15
104	A taxonomy of Semi-FIFO policies. , 2012, , .		18
105	SPAdes: A New Genome Assembly Algorithm and Its Applications to Single-Cell Sequencing. Journal of Computational Biology, 2012, 19, 455-477.	1.6	20,193
106	Online Recommender System for Radio Station Hosting. Lecture Notes in Business Information Processing, 2012, , 1-12.	1.0	4
107	Algebraic cryptography: new constructions and their security against provable break. St Petersburg Mathematical Journal, 2009, 20, 937-953.	0.4	3
108	Motivic decomposition of anisotropic varieties of type F4 into generalized Rost motives. Journal of K-Theory, 2009, 3, 85-102.	0.2	10

#	ARTICLE	IF	CITATIONS
109	The event bush as a semantic-based numerical approach to natural hazard assessment (exemplified by) Tj ETQq1 1 0.784314 rgBT /Over	4.2	25
110	On complete one-way functions. Problems of Information Transmission, 2009, 45, 168-183.	0.5	2
111	$\mathrm{A_2}$-proof of structure theorems for Chevalley groups of type $\mathrm{F_4}$. St Petersburg Mathematical Journal, 2009, 20, 527-551.	0.4	14
112	A Feebly Secure Trapdoor Function. Lecture Notes in Computer Science, 2009, , 129-142.	1.3	6
113	Structure of Chevalley groups: The proof from the book. Journal of Mathematical Sciences, 2007, 140, 626-645.	0.4	16
114	Hard satisfiable instances for DPLL-type algorithms. Journal of Mathematical Sciences, 2005, 126, 1205-1209.	0.4	2
115	Directed Cycles in Bayesian Belief Networks: Probabilistic Semantics and Consistency Checking Complexity. Lecture Notes in Computer Science, 2005, , 214-223.	1.3	8
116	Improving Quality of Service for Radio Station Hosting: An Online Recommender System Based on Information Fusion. SSRN Electronic Journal, 0, , .	0.4	0